



September 18, 2013

Brad Davis
Zia Engineering & Environmental
755 S Telshor Blvd Ste F-201
Las Cruces, NM 88011
TEL: (575) 993-6824
FAX (575) 532-1587
RE: HELSTF TSA

Order No.: 1309037

Dear Brad Davis:

DHL Analytical, Inc. received 8 sample(s) on 9/6/2013 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of DoD QSM Ver 4.2 and NELAC except where noted in the Case Narrative. All non-NELAC methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. This report shall not be reproduced except in full without the written approval of DHL Analytical, Inc. Thank you for using DHL Analytical.

Sincerely,

A handwritten signature in red ink, appearing to read "John DuPont".

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas & DoD Laboratory Certification Number: T104704211-13-11 & DoD ELAP #ADE-1416 v2



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755 S. Tebor Blvd. Ste. F-201
Las Cruces, NM 88011
575-532-1526 u
575-532-1587 f

CHAIN OF CUSTODY RECORD

#1399037
PAGE 1 OF 1

PROJECT NO.		PROJECT NAME			NO. OF CONTAINERS	ANALYSIS REQUESTED						REMARKS
SAMPLER'S SIGNATURE						Benzene	Toluene	Ethylbenzene	Xylenes	MTBE		
DATE	TIME	SAMPLE ID	MATRIX	LAB NO.								
9-5-13	1105	HTSA-0197-HMW-048-0913-TB	Water		2	X	X	X	X			Trip Blank
9-5-13	1105	HTSA-0197-HMW-048-0913	Water		3	X	X	X	X	X		
9-5-13	1205	HTSA-0197-HMW-049-0913	Water		3	X	X	X	X	X		
9-5-13	1205	HTSA-0197-HMW-149-0913	Water		3	X	X	X	X	X		
9-5-13	1205	HTSA-0197-FB-001-0913	Water		3	X	X	X	X	X		Field Blank
9-5-13	1308	HTSA-0197-HMW-050-0913	Water		3	X	X	X	X	X		
9-5-13	1325	HTSA-0197-RB-001-0913	Water		3	X	X	X	X	X		Equipment Blank
9-5-13	1448	HTSA-0197-HMW-052-0913	Water		3	X	X	X	X	X		
9-5-13	1448	HTSA-0197-HMW-052-0913 - ms/msd	Water		3	X	X	X	X	X		Matrix spike / duplicate

PROJECT INFORMATION		SAMPLES RECEIVED		1. RELINQUISHED BY: (SIGNATURE) Bradley T. Davis (PRINTED NAME) 9-5-13 RECEIVED BY: (SIGNATURE) Jeddy (TIME/DATE) 9/5/13		2. RELINQUISHED BY: (SIGNATURE) Jeddy (PRINTED NAME) 9/6/13 945 RECEIVED BY: (SIGNATURE) Jeddy (TIME/DATE) 9/6/13 945		3. RECEIVED BY LAB: (SIGNATURE)	
PROJECT MANAGER Brad Davis		TOTAL NO. OF CONTAINERS						(PRINTED NAME)	
SHIPPING TO NO.		CHAIN OF CUSTODY SEALS Jeddy #59 21						(COMPANY)	
VIA: Fed EX		GOOD CONDITION/CHECKED						(TIME/DATE)	
		CONFORMS TO RECORD						SPECIAL INSTRUCTIONS/COMMENTS:	

FedEx *NEW Package*
Express *US Airbill*

FedEx
Tracking
Number

8037 3858 6231

Form
ID No.

0200

1 From

Date

9-5-13

Sender's
Name

Brad Davis

Phone

575 644-9192

Company

Zia Engineering

Address

755 S. Telshor Blvd.

F-201

Dept./Floor/Suite/Room

City

Las Cruces

State

NM

ZIP

88011

2 Your Internal Billing Reference

3 To

Recipient's
Name

J. Barker

Phone

512 388-8222

Company

DHL Analytical

Address

3300 Double Creek Drive

We cannot

use P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

Use this if you have:

HOLD location address or for continuation of your shipping address.

Round Rock

State

TX

ZIP

78664

HOLD Weekday
FedEx location address
REQUIRED. NOT available for
FedEx First Overnight.

HOLD Saturday
FedEx location address
REQUIRED. Available ONLY for
FedEx Priority Overnight and
FedEx 2Day to select locations.

4 Express Package Service

* To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.
For packages over 150 lbs., use the new
FedEx Express Freight US Airbill.

Next Business Day

☐ **FedEx First Overnight**
Earliest next business morning delivery to select
locations. Friday shipments will be delivered on
Monday unless SATURDAY Delivery is selected.

☒ **FedEx Priority Overnight**
Next business morning. Friday shipments will be
delivered on Monday unless SATURDAY Delivery
is selected.

☐ **FedEx Standard Overnight**
Next business afternoon.
Saturday Delivery NOT available.

2 or 3 Business Days

☐ **FedEx 2Day A.M.**
Second business morning.
Saturday Delivery NOT available.

☐ **FedEx 2Day**
Second business afternoon. Thursday shipments
will be delivered on Monday unless SATURDAY
Delivery is selected.

☐ **FedEx Express Saver**
Third business day.
Saturday Delivery NOT available.

5 Packaging *Declared value limit \$500.

☐ FedEx Envelope*

☐ FedEx Pak*

☐ FedEx
Box

☐ FedEx
Tube

☒ Other

6 Special Handling and Delivery Signature Options

☐ **SATURDAY Delivery**
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ **No Signature Required**
Package may be left without
obtaining a signature for delivery.

☐ **Direct Signature**
Someone at recipient's address
must sign for delivery. Fee applies.

☐ **Indirect Signature**
If no one is available at recipient's
address, someone at a neighboring
address may sign for delivery. For
residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

One box must be checked.

☒ **No**

☐ **Yes**

As per attached
Shipper's Declaration.

☐ **Yes**
Shipper's Declaration
not required.

☐ **Dry Ice**
Dry Ice, 9 UN 1845 _____ x _____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging
or placed in a FedEx Express Drop Box.

☐ **Cargo Aircraft Only**

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

Obtain recip.
Acct. No. ☐

☒ **Sender**
Acct. No. in Section
7 will be billed.

☐ **Recipient**

☐ **Third Party**

☐ **Credit Card**

☐ **Cash/Check**

Total Packages

Total Weight

Credit Card Auth.

Our liability is limited to US\$100 unless you declare a higher value. See the current FedEx Service Guide for details.

644

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CUSTODY SEAL

DATE

9-5-13

SIGNATURE

Bradley T. Davis

QEC

Quality Environmental Containers
800-255-3950 • 304-255-3900

Sample Receipt Checklist

Client Name Zia Engineering & Environmental

Date Received: 9/6/2013

Work Order Number 1309037

Received by JB

Checklist completed by: [Signature] 9/6/2013

Signature

Date

Reviewed by: SS 9/6/2013

Initials

Date

Carrier name FedEx 1day

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	2.1 °C
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH<2 acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/> LOT #
	Adjusted? _____		Checked by _____
Water - pH>9 (S) or pH>12 (CN) acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/> LOT #
	Adjusted? _____		Checked by _____

Any No response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

DHL Analytical, Inc.

Laboratory Review Checklist: Reportable Data

Project Name: HELSTF TSA		Date: 9/18/2013					
Reviewer Name: Angie O'Donnell		Laboratory Work Order: 1309037					
Prep Batch Number(s): See Prep Dates Report		Run Batch: See Analytical Dates Report					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-Custody (C-O-C)					
		1) Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				R1-01
		2) Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and Quality Control (QC) Identification					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test Reports					
		1) Were all samples prepared and analyzed within holding times?	X				
		2) Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		3) Were calculations checked by a peer or supervisor?	X				
		4) Were all analyte identifications checked by a peer or supervisor?	X				
		5) Were sample quantitation limits reported for all analytes not detected?	X				
		6) Were all results for soil and sediment samples reported on a dry weight basis?			X		
		7) Were % moisture (or solids) reported for all soil and sediment samples?			X		
		8) If required for the project, TICs reported?			X		
R4	O	Surrogate Recovery Data					
		1) Were surrogates added prior to extraction?	X				
		2) Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			R4-02
R5	OI	Test Reports/Summary Forms for Blank Samples					
		1) Were appropriate type(s) of blanks analyzed?	X				
		2) Were blanks analyzed at the appropriate frequency?	X				
		3) Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		4) Were blank concentrations < MQL?	X				
R6	OI	Laboratory Control Samples (LCS):					
		1) Were all COCs included in the LCS?	X				
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		3) Were LCSs analyzed at the required frequency?	X				
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		5) Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	X				
		6) Was the LCSD RPD within QC limits (if applicable)?			X		
R7	OI	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Data					
		1) Were the project/method specified analytes included in the MS and MSD?	X				
		2) Were MS/MSD analyzed at the appropriate frequency?	X				
		3) Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		4) Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical Duplicate Data					
		1) Were appropriate analytical duplicates analyzed for each matrix?			X		
		2) Were analytical duplicates analyzed at the appropriate frequency?			X		
		3) Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method Quantitation Limits (MQLs):					
		1) Are the MQLs for each method analyte included in the laboratory data package?	X				
		2) Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		3) Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	Other Problems/Anomalies					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		2) Were all necessary corrective actions performed for the reported data?	X				
		3) Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).

3 NA = Not applicable.

4 NR = Not Reviewed.

5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

DHL Analytical, Inc.
Laboratory Review Checklist (continued): Supporting Data
Project Name: HELSTF TSA

Date: 9/18/2013

Reviewer Name: Angie O'Donnell

Laboratory Work Order: 1309037

# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial Calibration (ICAL)					
		1) Were response factors and/or relative response factors for each analyte within QC limits?	X				
		2) Were percent RSDs or correlation coefficient criteria met?	X				
		3) Was the number of standards recommended in the method used for all analytes?	X				
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		5) Are ICAL data available for all instruments used?	X				
		6) Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and Continuing calibration Verification (ICCV and CCV) and Continuing Calibration blank (CCB)					
		1) Was the CCV analyzed at the method-required frequency?	X				
		2) Were percent differences for each analyte within the method-required QC limits?	X				
		3) Was the ICAL curve verified for each analyte?	X				
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass Spectral Tuning					
		1) Was the appropriate compound for the method used for tuning?	X				
		2) Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal Standards (IS)					
		1) Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw Data (NELAC section 1 appendix A glossary, and section 5.12)					
		1) Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		2) Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual Column Confirmation					
		1) Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively Identified Compounds (TICs)					
		1) If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) Results					
		1) Were percent recoveries within method QC limits?			X		
S9	I	Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions					
		1) Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method Detection Limit (MDL) Studies					
		1) Was a MDL study performed for each reported analyte?	X				
		2) Is the MDL either adjusted or supported by the analysis of DCSSs?	X				
S11	OI	Proficiency Test Reports					
		1) Was the lab's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards Documentation					
		1) Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/Analyte Identification Procedures					
		1) Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of Analyst Competency (DOC)					
		1) Was DOC conducted consistent with NELAC Chapter 5C?	X				
		2) Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/Validation Documentation for Methods (NELAC Chap 5)					
		1) Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory Standard Operating Procedures (SOPs)					
		1) Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).

3 NA = Not applicable.

4 NR = Not Reviewed.

5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Signature Page

This data package consists of:

This signature page, the laboratory review checklist, and the following reportable data:

- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC 5.13
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- R4 Surrogate recovery data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- R10 Other problems or anomalies.

The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

John DuPont – General Manager

Scott Schroeder – Technical Director



Signature

09/18/13

Date

CLIENT: Zia Engineering & Environmental
Project: HELSTF TSA
Lab Order: 1309037

CASE NARRATIVE

This case narrative describes abnormalities and deviations that may affect the results and summarizes all known issues that need to be highlighted for the data user to assess the results. This case narrative and the report contents are compliant with DoD QSM Ver 4.2 and NELAC.

Samples were analyzed using the methods outlined in the following references:

Method SW8260C - Volatile Organics

Exception Report R1-01

The samples were received on and log-in performed on 9/6/2013. A total of 8 samples were received and analyzed. The samples arrived in good condition and were properly packaged.

Exception Report R4-02

For Volatiles Analysis, the recovery of surrogate Dibromofluoromethane for Sample HTSA-0197-FB-001-0913 was slightly above method control limits. This is flagged accordingly in the Analytical Data report. The remaining surrogates for this sample were within method control limits. No further corrective actions were taken.

A summary of project communication follows:

DHL Analytical received the Project RFQ from the client on 12/29/09. Completed RFQ returned to client via email on 1/07/2010. Purchase Order/Terms and Conditions received and signed and approved by both parties on 01/25/2010.

Brad Davis of Zia requested a bottle kit via email from Jennifer Barker of DHL on 8/13/13.

DHL Bottle kit #4275 sent on 8/15/13 via Lonestar Overnight, to arrive by 8/19/13.

This sample delivery group arrived at DHL Analytical 9/6/13. Sample summary sent via email from Log-in to client on 9/6/13.

All hardcopies for the sample kit request, bill of lading for sample kit sent and login summary are kept in project folder or are filed in the project/Client folder as part of the Administrative records in the QA office..

CLIENT: Zia Engineering & Environmental
Project: HELSTF TSA
Lab Order: 1309037**Work Order Sample Summary**

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
1309037-01	HTSA-0197-HMW-048-0913-TB		09/05/13 11:05 AM	9/6/2013
1309037-02	HTSA-0197-HMW-048-0913		09/05/13 11:05 AM	9/6/2013
1309037-03	HTSA-0197-HMW-049-0913		09/05/13 12:05 PM	9/6/2013
1309037-04	HTSA-0197-HMW-149-0913		09/05/13 12:05 PM	9/6/2013
1309037-05	HTSA-0197-FB-001-0913		09/05/13 12:05 PM	9/6/2013
1309037-06	HTSA-0197-HMW-050-0913		09/05/13 01:08 PM	9/6/2013
1309037-07	HTSA-0197-RB-001-0913		09/05/13 01:25 PM	9/6/2013
1309037-08	HTSA-0197-HMW-052-0913		09/05/13 02:48 PM	9/6/2013

Lab Order: 1309037
Client: Zia Engineering & Environmental
Project: HELSTF TSA

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1309037-01A	HTSA-0197-HMW-048-0913-TB	09/05/13 11:05 AM	Trip Blank	SW5030C	Purge and Trap Water GC/MS	09/09/13 12:45 PM	59383
1309037-02A	HTSA-0197-HMW-048-0913	09/05/13 11:05 AM	Aqueous	SW5030C	Purge and Trap Water GC/MS	09/09/13 12:45 PM	59383
1309037-03A	HTSA-0197-HMW-049-0913	09/05/13 12:05 PM	Aqueous	SW5030C	Purge and Trap Water GC/MS	09/09/13 12:45 PM	59383
1309037-04A	HTSA-0197-HMW-149-0913	09/05/13 12:05 PM	Aqueous	SW5030C	Purge and Trap Water GC/MS	09/09/13 12:45 PM	59383
1309037-05A	HTSA-0197-FB-001-0913	09/05/13 12:05 PM	Field Blank	SW5030C	Purge and Trap Water GC/MS	09/09/13 12:45 PM	59383
1309037-06A	HTSA-0197-HMW-050-0913	09/05/13 01:08 PM	Aqueous	SW5030C	Purge and Trap Water GC/MS	09/09/13 12:45 PM	59383
1309037-07A	HTSA-0197-RB-001-0913	09/05/13 01:25 PM	Equip Blank	SW5030C	Purge and Trap Water GC/MS	09/09/13 12:45 PM	59383
1309037-08A	HTSA-0197-HMW-052-0913	09/05/13 02:48 PM	Aqueous	SW5030C	Purge and Trap Water GC/MS	09/09/13 12:45 PM	59383

Lab Order: 1309037
Client: Zia Engineering & Environmental
Project: HELSTF TSA

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1309037-01A	HTSA-0197-HMW-048-0913-TB	Trip Blank	SW8260C	8260 Water Volatiles by GC/MS	59383	1	09/09/13 05:34 PM	GCMS5_130909A
1309037-02A	HTSA-0197-HMW-048-0913	Aqueous	SW8260C	8260 Water Volatiles by GC/MS	59383	1	09/09/13 08:01 PM	GCMS5_130909A
1309037-03A	HTSA-0197-HMW-049-0913	Aqueous	SW8260C	8260 Water Volatiles by GC/MS	59383	1	09/09/13 08:26 PM	GCMS5_130909A
1309037-04A	HTSA-0197-HMW-149-0913	Aqueous	SW8260C	8260 Water Volatiles by GC/MS	59383	1	09/09/13 08:51 PM	GCMS5_130909A
1309037-05A	HTSA-0197-FB-001-0913	Field Blank	SW8260C	8260 Water Volatiles by GC/MS	59383	1	09/09/13 05:59 PM	GCMS5_130909A
1309037-06A	HTSA-0197-HMW-050-0913	Aqueous	SW8260C	8260 Water Volatiles by GC/MS	59383	1	09/09/13 09:16 PM	GCMS5_130909A
1309037-07A	HTSA-0197-RB-001-0913	Equip Blank	SW8260C	8260 Water Volatiles by GC/MS	59383	1	09/09/13 06:24 PM	GCMS5_130909A
1309037-08A	HTSA-0197-HMW-052-0913	Aqueous	SW8260C	8260 Water Volatiles by GC/MS	59383	1	09/09/13 09:40 PM	GCMS5_130909A

DHL Analytical, Inc.

Date: 18-Sep-13

CLIENT: Zia Engineering & Environmental
Project: HELSTF TSA
Project No:
Lab Order: 1309037

Client Sample ID: HTSA-0197-HMW-048-0913-TB
Lab ID: 1309037-01
Collection Date: 09/05/13 11:05 AM
Matrix: TRIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C				Analyst: DEW	
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 05:34 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	09/09/13 05:34 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 05:34 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/09/13 05:34 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/09/13 05:34 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 05:34 PM
Surr: 1,2-Dichloroethane-d4	107	0	70-120		%REC	1	09/09/13 05:34 PM
Surr: 4-Bromofluorobenzene	105	0	75-120		%REC	1	09/09/13 05:34 PM
Surr: Dibromofluoromethane	108	0	85-115		%REC	1	09/09/13 05:34 PM
Surr: Toluene-d8	99.8	0	85-120		%REC	1	09/09/13 05:34 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical, Inc.**Date:** 18-Sep-13

CLIENT: Zia Engineering & Environmental
Project: HELSTF TSA
Project No:
Lab Order: 1309037

Client Sample ID: HTSA-0197-HMW-048-0913
Lab ID: 1309037-02
Collection Date: 09/05/13 11:05 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C		Analyst: DEW			
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 08:01 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	09/09/13 08:01 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 08:01 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/09/13 08:01 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/09/13 08:01 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 08:01 PM
Surr: 1,2-Dichloroethane-d4	107	0	70-120		%REC	1	09/09/13 08:01 PM
Surr: 4-Bromofluorobenzene	103	0	75-120		%REC	1	09/09/13 08:01 PM
Surr: Dibromofluoromethane	109	0	85-115		%REC	1	09/09/13 08:01 PM
Surr: Toluene-d8	99.3	0	85-120		%REC	1	09/09/13 08:01 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: 18-Sep-13

CLIENT: Zia Engineering & Environmental
Project: HELSTF TSA
Project No:
Lab Order: 1309037

Client Sample ID: HTSA-0197-HMW-049-0913
Lab ID: 1309037-03
Collection Date: 09/05/13 12:05 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C				Analyst: DEW	
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 08:26 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	09/09/13 08:26 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 08:26 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/09/13 08:26 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/09/13 08:26 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 08:26 PM
Surr: 1,2-Dichloroethane-d4	112	0	70-120		%REC	1	09/09/13 08:26 PM
Surr: 4-Bromofluorobenzene	107	0	75-120		%REC	1	09/09/13 08:26 PM
Surr: Dibromofluoromethane	112	0	85-115		%REC	1	09/09/13 08:26 PM
Surr: Toluene-d8	97.9	0	85-120		%REC	1	09/09/13 08:26 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: 18-Sep-13

CLIENT: Zia Engineering & Environmental
Project: HELSTF TSA
Project No:
Lab Order: 1309037

Client Sample ID: HTSA-0197-HMW-149-0913
Lab ID: 1309037-04
Collection Date: 09/05/13 12:05 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C		Analyst: DEW			
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 08:51 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	09/09/13 08:51 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 08:51 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/09/13 08:51 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/09/13 08:51 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 08:51 PM
Surr: 1,2-Dichloroethane-d4	108	0	70-120		%REC	1	09/09/13 08:51 PM
Surr: 4-Bromofluorobenzene	106	0	75-120		%REC	1	09/09/13 08:51 PM
Surr: Dibromofluoromethane	107	0	85-115		%REC	1	09/09/13 08:51 PM
Surr: Toluene-d8	98.0	0	85-120		%REC	1	09/09/13 08:51 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: 18-Sep-13

CLIENT: Zia Engineering & Environmental
Project: HELSTF TSA
Project No:
Lab Order: 1309037

Client Sample ID: HTSA-0197-FB-001-0913
Lab ID: 1309037-05
Collection Date: 09/05/13 12:05 PM
Matrix: FIELD BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C		Analyst: DEW			
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 05:59 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	09/09/13 05:59 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 05:59 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/09/13 05:59 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/09/13 05:59 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 05:59 PM
Surr: 1,2-Dichloroethane-d4	115	0	70-120		%REC	1	09/09/13 05:59 PM
Surr: 4-Bromofluorobenzene	104	0	75-120		%REC	1	09/09/13 05:59 PM
Surr: Dibromofluoromethane	119	0	85-115	S	%REC	1	09/09/13 05:59 PM
Surr: Toluene-d8	98.7	0	85-120		%REC	1	09/09/13 05:59 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical, Inc.**Date:** 18-Sep-13

CLIENT: Zia Engineering & Environmental
Project: HELSTF TSA
Project No:
Lab Order: 1309037

Client Sample ID: HTSA-0197-HMW-050-0913
Lab ID: 1309037-06
Collection Date: 09/05/13 01:08 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C				Analyst: DEW	
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 09:16 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	09/09/13 09:16 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 09:16 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/09/13 09:16 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/09/13 09:16 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 09:16 PM
Surr: 1,2-Dichloroethane-d4	111	0	70-120		%REC	1	09/09/13 09:16 PM
Surr: 4-Bromofluorobenzene	105	0	75-120		%REC	1	09/09/13 09:16 PM
Surr: Dibromofluoromethane	113	0	85-115		%REC	1	09/09/13 09:16 PM
Surr: Toluene-d8	100	0	85-120		%REC	1	09/09/13 09:16 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: 18-Sep-13

CLIENT: Zia Engineering & Environmental
Project: HELSTF TSA
Project No:
Lab Order: 1309037

Client Sample ID: HTSA-0197-RB-001-0913
Lab ID: 1309037-07
Collection Date: 09/05/13 01:25 PM
Matrix: EQUIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C				Analyst: DEW	
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 06:24 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	09/09/13 06:24 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 06:24 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/09/13 06:24 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/09/13 06:24 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 06:24 PM
Surr: 1,2-Dichloroethane-d4	111	0	70-120		%REC	1	09/09/13 06:24 PM
Surr: 4-Bromofluorobenzene	102	0	75-120		%REC	1	09/09/13 06:24 PM
Surr: Dibromofluoromethane	113	0	85-115		%REC	1	09/09/13 06:24 PM
Surr: Toluene-d8	98.9	0	85-120		%REC	1	09/09/13 06:24 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: 18-Sep-13

CLIENT: Zia Engineering & Environmental
Project: HELSTF TSA
Project No:
Lab Order: 1309037

Client Sample ID: HTSA-0197-HMW-052-0913
Lab ID: 1309037-08
Collection Date: 09/05/13 02:48 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C		Analyst: DEW			
Methyl tert-butyl ether	0.0126	0.000300	0.00100		mg/L	1	09/09/13 09:40 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	09/09/13 09:40 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 09:40 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/09/13 09:40 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/09/13 09:40 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/09/13 09:40 PM
Surr: 1,2-Dichloroethane-d4	113	0	70-120		%REC	1	09/09/13 09:40 PM
Surr: 4-Bromofluorobenzene	106	0	75-120		%REC	1	09/09/13 09:40 PM
Surr: Dibromofluoromethane	112	0	85-115		%REC	1	09/09/13 09:40 PM
Surr: Toluene-d8	98.1	0	85-120		%REC	1	09/09/13 09:40 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

CLIENT: Zia Engineering & Environmental
Work Order: 1309037
Project: HELSTF TSA

ANALYTICAL QC SUMMARY REPORT**RunID: GCMS5_130909A**

The QC data in batch 59383 applies to the following samples: 1309037-01A, 1309037-02A, 1309037-03A, 1309037-04A, 1309037-05A, 1309037-06A, 1309037-07A, 1309037-08A

Sample ID: LCS-59383	Batch ID: 59383	TestNo: SW8260C	Units: mg/L
SampType: LCS	Run ID: GCMS5_130909A	Analysis Date: 9/9/2013 1:24:00 PM	Prep Date: 9/9/2013

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0226	0.00100	0.0232	0	97.2	80	120			
Ethylbenzene	0.0225	0.00100	0.0232	0	96.9	75	125			
m,p-Xylene	0.0461	0.00200	0.0464	0	99.3	75	130			
Methyl tert-butyl ether	0.0221	0.00100	0.0232	0	95.3	65	125			
o-Xylene	0.0234	0.00100	0.0232	0	101	80	120			
Toluene	0.0224	0.00200	0.0232	0	96.6	75	120			
Surr: 1,2-Dichloroethane-d4	197		200.0		98.6	70	120			
Surr: 4-Bromofluorobenzene	201		200.0		100	75	120			
Surr: Dibromofluoromethane	204		200.0		102	85	115			
Surr: Toluene-d8	201		200.0		100	85	120			

Sample ID: MB-59383	Batch ID: 59383	TestNo: SW8260C	Units: mg/L
SampType: MBLK	Run ID: GCMS5_130909A	Analysis Date: 9/9/2013 3:03:00 PM	Prep Date: 9/9/2013

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.000200	0.00100								
Ethylbenzene	<0.000300	0.00100								
m,p-Xylene	<0.000600	0.00200								
Methyl tert-butyl ether	<0.000300	0.00100								
o-Xylene	<0.000300	0.00100								
Toluene	<0.000600	0.00200								
Surr: 1,2-Dichloroethane-d4	200		200.0		100	70	120			
Surr: 4-Bromofluorobenzene	212		200.0		106	75	120			
Surr: Dibromofluoromethane	200		200.0		100	85	115			
Surr: Toluene-d8	201		200.0		101	85	120			

Sample ID: 1309022-04AMS	Batch ID: 59383	TestNo: SW8260C	Units: mg/L
SampType: MS	Run ID: GCMS5_130909A	Analysis Date: 9/9/2013 10:05:00 PM	Prep Date: 9/9/2013

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0227	0.00100	0.0232	0	97.8	80	120			
Ethylbenzene	0.0232	0.00100	0.0232	0	99.8	75	125			
m,p-Xylene	0.0476	0.00200	0.0464	0	103	75	130			
Methyl tert-butyl ether	0.0220	0.00100	0.0232	0	94.8	65	125			
o-Xylene	0.0242	0.00100	0.0232	0	104	80	120			
Toluene	0.0229	0.00200	0.0232	0	98.7	75	120			
Surr: 1,2-Dichloroethane-d4	212		200.0		106	70	120			
Surr: 4-Bromofluorobenzene	198		200.0		98.8	75	120			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1309037
Project: HELSTF TSA

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_130909A

Sample ID: 1309022-04AMS	Batch ID: 59383	TestNo: SW8260C	Units: mg/L							
SampType: MS	Run ID: GCMS5_130909A	Analysis Date: 9/9/2013 10:05:00 PM	Prep Date: 9/9/2013							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	207		200.0		104	85	115			
Surr: Toluene-d8	196		200.0		97.8	85	120			

Sample ID: 1309022-04AMSD	Batch ID: 59383	TestNo: SW8260C	Units: mg/L							
SampType: MSD	Run ID: GCMS5_130909A	Analysis Date: 9/9/2013 10:29:00 PM	Prep Date: 9/9/2013							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0229	0.00100	0.0232	0	98.5	80	120	0.703	30	
Ethylbenzene	0.0230	0.00100	0.0232	0	99.2	75	125	0.563	30	
m,p-Xylene	0.0481	0.00200	0.0464	0	104	75	130	0.899	30	
Methyl tert-butyl ether	0.0229	0.00100	0.0232	0	98.8	65	125	4.14	30	
o-Xylene	0.0246	0.00100	0.0232	0	106	80	120	1.80	30	
Toluene	0.0226	0.00200	0.0232	0	97.4	75	120	1.36	30	
Surr: 1,2-Dichloroethane-d4	205		200.0		102	70	120	0	0	
Surr: 4-Bromofluorobenzene	203		200.0		101	75	120	0	0	
Surr: Dibromofluoromethane	202		200.0		101	85	115	0	0	
Surr: Toluene-d8	198		200.0		99.2	85	120	0	0	

Sample ID: 1309037-08AMS	Batch ID: 59383	TestNo: SW8260C	Units: mg/L							
SampType: MS	Run ID: GCMS5_130909A	Analysis Date: 9/9/2013 10:55:00 PM	Prep Date: 9/9/2013							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0236	0.00100	0.0232	0	102	80	120			
Ethylbenzene	0.0237	0.00100	0.0232	0	102	75	125			
m,p-Xylene	0.0487	0.00200	0.0464	0	105	75	130			
Methyl tert-butyl ether	0.0398	0.00100	0.0232	0.0126	117	65	125			
o-Xylene	0.0241	0.00100	0.0232	0	104	80	120			
Toluene	0.0238	0.00200	0.0232	0	103	75	120			
Surr: 1,2-Dichloroethane-d4	214		200.0		107	70	120			
Surr: 4-Bromofluorobenzene	198		200.0		98.8	75	120			
Surr: Dibromofluoromethane	210		200.0		105	85	115			
Surr: Toluene-d8	195		200.0		97.7	85	120			

Sample ID: 1309037-08AMSD	Batch ID: 59383	TestNo: SW8260C	Units: mg/L							
SampType: MSD	Run ID: GCMS5_130909A	Analysis Date: 9/9/2013 11:19:00 PM	Prep Date: 9/9/2013							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0236	0.00100	0.0232	0	102	80	120	0.254	30	
Ethylbenzene	0.0237	0.00100	0.0232	0	102	75	125	0.127	30	
m,p-Xylene	0.0476	0.00200	0.0464	0	103	75	130	2.12	30	
Methyl tert-butyl ether	0.0405	0.00100	0.0232	0.0126	120	65	125	1.67	30	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1309037
Project: HELSTF TSA

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_130909A

Sample ID: 1309037-08AMSD	Batch ID: 59383	TestNo: SW8260C	Units: mg/L							
SampType: MSD	Run ID: GCMS5_130909A	Analysis Date: 9/9/2013 11:19:00 PM	Prep Date: 9/9/2013							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
o-Xylene	0.0239	0.00100	0.0232	0	103	80	120	0.959	30	
Toluene	0.0236	0.00200	0.0232	0	102	75	120	1.14	30	
Surr: 1,2-Dichloroethane-d4	208		200.0		104	70	120	0	0	
Surr: 4-Bromofluorobenzene	200		200.0		99.9	75	120	0	0	
Surr: Dibromofluoromethane	202		200.0		101	85	115	0	0	
Surr: Toluene-d8	196		200.0		97.8	85	120	0	0	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1309037
Project: HELSTF TSA

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_130909A

Sample ID: ICV-130909	Batch ID: R68548	TestNo: SW8260C	Units: mg/L							
SampType: ICV	Run ID: GCMS5_130909A	Analysis Date: 9/9/2013 1:00:00 PM	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0411	0.00100	0.0464	0	88.5	80	120			
Ethylbenzene	0.0409	0.00100	0.0464	0	88.0	80	120			
m,p-Xylene	0.0858	0.00200	0.0928	0	92.4	80	120			
Methyl tert-butyl ether	0.0412	0.00100	0.0464	0	88.9	80	120			
o-Xylene	0.0447	0.00100	0.0464	0	96.3	80	120			
Toluene	0.0409	0.00200	0.0464	0	88.1	80	120			
Surr: 1,2-Dichloroethane-d4	200		200.0		99.9	70	120			
Surr: 4-Bromofluorobenzene	195		200.0		97.7	75	120			
Surr: Dibromofluoromethane	200		200.0		100	85	115			
Surr: Toluene-d8	197		200.0		98.3	85	120			

Qualifiers:

- B Analyte detected in the associated Method Blank
- J Analyte detected between MDL and RL
- ND Not Detected at the Method Detection Limit
- RL Reporting Limit
- J Analyte detected between SDL and RL

- DF Dilution Factor
- MDL Method Detection Limit
- R RPD outside accepted control limits
- S Spike Recovery outside control limits
- N Parameter not NELAC certified

Lab Order: 1309037
Client: Zia Engineering & Environmental
Project: HELSTF TSA

Sequence Report

Run ID: GCMS5_130909A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
ICV-130909	-----	SW8260C	R68548	1	9/9/2013 1:00:00 PM		A
LCS-59383	-----	SW8260C	59383	1	9/9/2013 1:24:00 PM	9/9/2013 12:45:50 PM	A
MB-59383	-----	SW8260C	59383	1	9/9/2013 3:03:00 PM	9/9/2013 12:45:50 PM	A
1309037-01A	HTSA-0197-HMW-048-0913-TB	SW8260C	59383	1	9/9/2013 5:34:00 PM	9/9/2013 12:45:50 PM	T
1309037-05A	HTSA-0197-FB-001-0913	SW8260C	59383	1	9/9/2013 5:59:00 PM	9/9/2013 12:45:50 PM	F
1309037-07A	HTSA-0197-RB-001-0913	SW8260C	59383	1	9/9/2013 6:24:00 PM	9/9/2013 12:45:50 PM	E
1309037-02A	HTSA-0197-HMW-048-0913	SW8260C	59383	1	9/9/2013 8:01:00 PM	9/9/2013 12:45:50 PM	A
1309037-03A	HTSA-0197-HMW-049-0913	SW8260C	59383	1	9/9/2013 8:26:00 PM	9/9/2013 12:45:50 PM	A
1309037-04A	HTSA-0197-HMW-149-0913	SW8260C	59383	1	9/9/2013 8:51:00 PM	9/9/2013 12:45:50 PM	A
1309037-06A	HTSA-0197-HMW-050-0913	SW8260C	59383	1	9/9/2013 9:16:00 PM	9/9/2013 12:45:50 PM	A
1309037-08A	HTSA-0197-HMW-052-0913	SW8260C	59383	1	9/9/2013 9:40:00 PM	9/9/2013 12:45:50 PM	A
1309022-04AMS	-----	SW8260C	59383	1	9/9/2013 10:05:00 PM	9/9/2013 12:45:50 PM	A
1309022-04AMSD	-----	SW8260C	59383	1	9/9/2013 10:29:00 PM	9/9/2013 12:45:50 PM	A
1309037-08AMS	HTSA-0197-HMW-052-0913MS	SW8260C	59383	1	9/9/2013 10:55:00 PM	9/9/2013 12:45:50 PM	A
1309037-08AMSD	HTSA-0197-HMW-052-	SW8260C	59383	1	9/9/2013 11:19:00 PM	9/9/2013 12:45:50 PM	A